



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,593	09/12/2003	Seiji Iino	117101	7871
25944	7590	01/10/2008	EXAMINER	
OLIFF & BERRIDGE, PLC			QIN, YIXING	
P.O. BOX 320850			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22320-4850			2625	
			MAIL DATE	DELIVERY MODE
			01/10/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/660,593	IINO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yixing Qin	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/12/03</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

Claims 1-19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The independent claim 1's first limitation claims that there is an image processing unit for performing predetermined image processing upon first image data. The fourth limitation states that "when third image data on which said predetermined image processing will be performed..."

First of all, the said image processing is performed on a first image. The fourth limitation's claim contradicts this by saying the said predetermine image processing is performed on the third image data. Thus, it is unclear/contradictory how one processing meant for a first image data is now somehow performed on a third image data.

Secondly, it is not known how a third image data is created and how it includes a portion different than a first image data. There is also nothing claimed regarding the processing of image data or generation of image data to create a third image data. Thus, the creation of the fourth image data and the image combination is also unclear/unknown since these items depend on the third image data.

The second independent claim 14 is a method claim that suffered from the same deficiencies as claim 1. All other claims are dependent off either claim 1 or claim 14 and thus also suffer from these deficiencies.

Due to the above mentioned items, the claims are not in an examinable state because it is unclear as to how one would create the invention given the claimed units and methods. Appropriate correction is required to further describe/clarify the above mentioned deficiencies.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1, 2, 14 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (U.S. Patent No. 5,801,773)

Regarding claims 1, 14, Ikeda discloses Image processing apparatus comprising: an image processing unit for performing predetermined image processing upon first image data so as to obtain second image data; (column 7, lines 42-47, a processed image data is output, so that is the second image data. Also see Fig. 5, the standard image 9 is the first image, the bright image 10 is the second image )

an image storage unit for storing said second image data; (column 7, lines 55-60) and

an image combining unit for combining a plurality of image data; (Fig. 6) wherein:

when third image data (dark image 11 is the third image) on which said predetermined image processing will be performed includes a portion different from said first image data (processing is made to create 11'), said image processing unit performs said predetermined image processing upon said different portion between said third image data and said first image data so as to generate fourth image data (11' is the fourth image data); and

Ikeda does not explicitly disclose "said image combining unit combines, of said second image data stored in said image storage unit, a portion corresponding to said third image data other than said different portion with said fourth image data."

However, Ikeda discloses in Fig. 5 and column 8, lines 45-65 that various images of differing luminance levels can be combined.. Although this is not explicitly the claimed combination, one of ordinary skill would obviously have been able to perform the claimed combination depending on the particular needs of the resulting combination.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used Ikeda to perform the claimed combination.

The motivation would have been to allow a particular combination to be performed depending on the needs of the user.

Therefore, it would have been obvious to use Ikeda to obtain the invention as specified.

Regarding claims 2, 15, Ikeda discloses Image processing apparatus according to Claim 1, wherein:

when one of said first image data and said third image data can be subjected to processing, said image processing unit performs a color correction process and/or a RIP process upon said image data that can be subjected to processing. (Fig. 5 discloses that the images are subjected to luminance processing, which effectively alters the color of the image by making it brighter or darker.)

II. Claims 3, 9-13, 16, 18, 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (U.S. Patent No. 5,801,773) in view of Sato (U.S. Patent No. 5,737,620)

Regarding claims 3, 16, Ikeda discloses Image processing apparatus according to Claim 1, wherein:

It does not explicitly disclose "when one of said first image data and said third image data is drawing data described in a drawing language, said image processing unit further performs an unfolding process upon said drawing data so as to unfold said drawing data and thereby obtain one of said second image data and said fourth image data."

However, the secondary reference, Sato, discloses in column 2, lines 8-32 that images can be combined in PDL format.

Ikeda and Sato are combinable because both are in the art of image combination.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have processed images using the language data.

The motivation would have been to allow for an simple way to process and combine images.

Therefore, it would have been obvious to combine Ikeda and Sato to obtain the invention as specified.

Regarding claim 9, Ikeda discloses Image processing apparatus according to Claim 1, wherein:

said image processing unit compares said first image data with said third image data so as to detect said different portion. (column 18, lines 5-10)

Regarding claim 10, 18 Ikeda discloses Image processing apparatus according to Claim 1, wherein:

when said image processing is performed upon said first image data and said third image data by page, said image processing unit detects, as said different portion, pages including a difference between said first image data and said third image data. (column 18, lines 5-10)

Regarding claim 11, Ikeda discloses Image processing apparatus according to Claim 1, wherein:

when said image processing is performed upon said first image data and said third image data by sheet of paper, said image processing unit detects, as said different portion, sheets of paper including a difference between said first image data and said third image data. (column 18, lines 5-10)

Regarding claim 12, Ikeda discloses Image processing apparatus according to Claim 10, wherein:

when said difference in one page results in a difference in all of subsequent pages, said image processing unit detects, as said different portion, all of said page including said difference and said subsequent pages. (column 18, lines 5-10 and Fig. 5)

Regarding claim 13, Ikeda discloses Image processing apparatus according to Claim 11, wherein:

when said difference in one sheet of paper results in a difference in all of subsequent sheets of paper, said image processing unit detects, as said different portion, all of said sheet of paper including said difference and said subsequent sheets of paper. (column 18, lines 5-42)

III. Claims 4-8 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda (U.S. Patent No. 5,801,773) in view of Sato (U.S. Patent No. 5,737,620) and further in view of Kurijai (U.S. P.G. Pub No. 2001/0053295)

Regarding claim 4, 17. Image processing apparatus according to Claim 1, further comprising:

It does not explicitly disclose "an accounting unit for performing an accounting process for at least said image processing upon said different portion."

However, Kurijai discloses in Fig. 5 various information that could be used for job accounting. The various blocks can be interpreted to be portions of a page.

All references are combinable because they are in the art of printing and analysis of image information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have calculated print/processing charges.

The motivation would have been to have allowed a manager or management system to properly charge clients for image/print usage.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

Regarding claim 5, Kurijai discloses Image processing apparatus according to Claim 4, wherein:

said different portion is measured by page, and said accounting unit calculates a fee to be charged in said accounting process based on the number of pages of said different portion. (P[0072] of Kurijai discloses calculation based upon amount of pages)

Regarding claim 6, Kurijai discloses Image processing apparatus according to Claim 4, wherein:

said accounting unit calculates a fee to be charged in said accounting process based on an area of said different portion. (Fig. 5 shows various information regarding the print job. The accounting is based upon all the various factors. One can interpret the pages to be an area of the print job.)

Regarding claim 7, Kurijai discloses Image processing apparatus according to Claim 4, wherein:

said image processing uses processing data, and said accounting unit does accounting for said processing data used in said image processing. (Fig. 5)

Regarding claim 8, Kurijai discloses Image processing apparatus according to Claim 4, wherein:

when said image processing is performed upon said different portion a plurality of times, said accounting unit performs said accounting process for all or a part of second-time and subsequent ones of said image processing. (Fig. 5 shows the various processings that have taken place such as color, or size)

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
YO

  
TWYLER LAMB HASKINS  
SUPERVISORY PATENT EXAMINER